

ABSTRACT OF THE DISCLOSURE

A multiple envelope control system and method expands the operating capabilities of a lift vehicle. The vehicle includes a platform mounted to a telescoping main boom. The main boom is configured for lift/lower function and telescope function. The multiple envelope control system includes a selector switch for selecting between a plurality of capacity modes including at least a low load mode and a high load mode. A plurality of sensors are strategically positioned on the main boom to cooperatively define position zones of the platform. A control system determines in which position zone the platform located according to signals from the plurality of sensors. The control system controls an envelope of the platform based on a position of the selector switch. By strategically positioning the sensors to define the position zones, inexpensive switches, such as limit switches or the like, can be used, thereby reducing manufacturing costs of the machine.